

THE EFFECT OF PRODUCT INNOVATION ON THE EXPORT PERFORMANCE OF KOSOVO SMEs

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Received: 30. 5. 2020

Accepted: 3. 12. 2020

DOI: <https://doi.org/10.30924/mjcmi.25.2.12>

Preliminary communication

UDC 334.722(497.115)

658.624:339.564

Abstract

The aim of the paper is to provide a better understanding of factors influencing product innovations that are important to SMEs' exporting activities. A probit model is used to analyse the innovation pattern in 100 Kosovo manufacturing and exporting SMEs. They export to the EU and regional countries' markets. Our data shows that there is a link between the type of product innovation and the increase in exports. Incremental innovation shows a strong positive relationship

with export growth of these SMEs, a result should prove helpful to both researchers of SME product innovation and managers of exporting SMEs. This study addresses the current gap that is present in the Western Balkan literature by evaluating the impact of product innovation on SMEs export performance.

Keywords: SMEs, product innovation, export, Kosovo, Western Balkans.

1. INTRODUCTION

The development of SMEs and national economies depends heavily on successful management of innovations. Many transition countries, such as those of the Western Balkans, face the problem of perception of their products, which are often considered "old-fashioned" and poorly developed technologically. This prejudice stems from the fact that years of supply-driven economics have made SMEs from these countries very

slow and rigid in handling the expectations of their customers. In such a market, there were no economic incentives for SMEs to develop skills, such as flexibility and innovation (Baković, 2010).

The Western Balkans is a geographical and geopolitical term, referring to Albania, Bosnia and Herzegovina, Serbia, North Macedonia, Kosovo, and Montenegro, all in the process of joining the European Union. In these countries, the SME sector

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and foreign trade are considered the main drivers of general development. Bartlett (2009) has argued that the region has failed to take full advantage of the globalization process, and has even suffered from the major flaws of this process. The wars and ethnic conflicts that affected the region in the 1990s have pushed these countries into the European “super-periphery.”

In recent years, all Western Balkan countries have signed the Stabilization and Association Agreement (SAA) with the European Union, which means they have, also, fully approved the process of trade liberalization. The region has also undertaken significant structural reforms. As a result, the business climate has been improving, while the private sector is strengthening, a significant number of old social firms have been privatized, and a vibrant SME sector has emerged (Gashi, 2017).

However, in terms of trade opening, which is defined as the value of exports and imports as a share of GDP, the Western Balkans lags behind the Central Eastern European and Baltic countries. Exporting SMEs in the Western Balkans face many obstacles to doing business, because of the poor quality of infrastructure. Support from local institutions is inadequate, as they do not have sufficient capacity. These obstacles are not faced by SMEs in other regions of Europe. Also, the cost of export is very high. These barriers hinder the normal development of trade between this region and the EU countries (Sanfey and Milatovic, 2018; Jusufi and Bellaqa, 2019).

Qorraj and Jusufi (2018) advise that enterprises of these countries improve their productivity to increase their exports. This can be achieved through the introduction of new technologies into production

processes. These investments will enable accelerated growth of their exports in the EU market. In terms of investment capacity, local investors in this region do not have a strong material and a financial base. It is the foreign investors with accumulated capital, who could create new jobs and an accelerated economic development. However, these investors have not yet entered the region, due to the lack of information (Ukaj, 2015; Jusufi and Gashi-Sadiku, 2020). Attracting foreign direct investment is not an easy task for the countries in the region, which find it increasingly difficult to adapt to the flow of world economic developments, due to the long and difficult transition (Jusufi and Lubeniqi, 2019; Jusufi and Ajdarpašić, 2020).

Within the innovative activities of exporting SMEs, product innovations are of particular importance. The innovation activities and export performance of exporting SMEs are closely related. Furthermore, the conceptualization of innovation and the level of development of countries moderate the link between innovative activities and success in increasing the level of exports. It should be noted that production-oriented innovation (product innovation) has more impact on innovation-financial export performance association, while input-oriented innovation has more impact on market performance and strategic performance (Bıçakcıoğlu-Peynirci et al., 2019).

This paper is organized as follows: The introduction is presented in Part 1 and the literature review in Part 2. Data are introduced and methodology explained in Part 3. Section 4 explains the results of the research, while Part 5 concludes the paper.

2. LITERATURE REVIEW

2.1. Characteristics of SMEs in Western Balkans

Small and Medium-sized Enterprises (SMEs) are very important in all market economies. The importance of SMEs for an economy is based on three elements: their role in the process of revitalization of market innovations, their economic weight in the market environment and the generation of employment in the country's domestic economy (Pollak and Dorčak, 2016; Šimić-Šarić, 2017). SMEs have a large share in the economies of the Western Balkan countries. Serbia represents the largest economy in the region and it specializes in producing commodities that require low and medium technologies. Meanwhile, the economies of Kosovo, Albania, Bosnia and Herzegovina, North Macedonia, and Montenegro are small open economies, dominated by labor-intensive industries. Textiles, agriculture and the service sector prevail.

The number of SMEs in the region is 717,973, equivalent to 39 SMEs per 1000 inhabitants, with the number of SMEs varying from country to country. The highest frequency of SMEs is in Bosnia and Herzegovina with 48.7 SMEs per 1,000 inhabitants, while the lowest frequency is in Kosovo, with 25.5 SMEs per 1,000 inhabitants (Rehman et al., 2019). The best and most sustainable solution to the socio-economic problems of the countries of this region is to provide support for setting up and developing SMEs, organized by responsible institutions. There are several steps that have been taken in this regard (Džafić et al., 2011).

Greater internationalization of SMEs is a necessary process. The sooner it begins, the sooner it will enable long-term growth and development. Only SMEs that run

their business according to the international standards and base it on planned management will be able to survive. There are strong reasons that push SMEs to internationalize (Korda and Snoj, 2008; Paunović and Prebežac, 2010). In almost all Western economies, R&D activities take place in both large enterprises and SMEs. Large enterprises have large financial and technological resources, which represents an advantage in realizing innovation (Krasniqi and Peci, 2017). SMEs' innovation capabilities include entrepreneurial dynamism and flexibility to adapt in changing internal and external conditions. Also, SMEs are in a better position to innovate, because of their simplified organizational and decision-making structures, which makes them more responsible for changing customer demand, when compared to large firms.

In developing and middle-income countries, SMEs and start-ups have creative business ideas, but these may not always be well-developed. This prevents them from attracting financial resources from abroad for further development of these creative ideas. In the Western Balkans, enterprises lack the willingness to invest in innovative ideas. The reasons are related to a low level of investment in business development proposals, a hesitation by entrepreneurs to submit to partial ownership and control of their business, lack of knowledge about external sources of finance, lack of understanding of the main factors that influence investors' decisions (Cusolito et al. 2018; Al-Tal and Emeagwali, 2019).

All these reasons hinder the development of innovative activities aimed at developing entrepreneurship. Ethnic diversity, which has always characterized the Balkan region, can increase innovation and create innovative ideas (Efendic and Pugh, 2018). Unfortunately, the Balkan countries have

not used this element to their benefit, to build societies, based on a range of different opinions and ideas that serve as a generator of economic and social development. On the contrary, it has been exploited to create prejudices that brought the nations of this region to the brink of human catastrophe.

2.2. Relationship between innovation and exports

There are two views of the relationship between exports and innovation activities. The first view concerns international trade models that emphasize product cycle features in the production of goods over a period of time. These models view innovation as exogenous and assume that innovation affects the level of exports. The basic premise is that the developed countries, due to certain economic advantages, export innovative goods all over the world. Once these goods become mature, they are imitated by the developing countries, which then export these goods to the developed countries. Export and innovation are directly related, because, in order to keep their exports and revenues high, the countries need to continuously develop innovative activities.

The second view concerns endogenous growth patterns. These models recognize the impact of an open economy. These models endogenize the degree and level of innovation and emphasize that, in innovative activity, international trade will have dynamic effects (Lachenmaier and Woessmann, 2004). Aralica et al. (2008) have observed a U-shape relation between size of the firms and their innovation propensity, whereby innovation propensity (the likelihood of introducing a new product or service) increases with firm size, measured by the number of employees, but then drops in the case of the largest firms that have not undergone restructuring. It should also be

noted that the level of innovation of SMEs in specific industries derives from the characteristics of the markets, in which these SMEs operate, rather than from the characteristics of products and technologies, prevalent in these industries.

Innovation is about modifying products and processes with different technical standards, tastes and customer requirements in the target markets. It is very important that these requirements are successfully met by a SME (Pejić Bach et al. 2015; Bezdrob and Šunje, 2014). This can be measured indirectly, through the launching an existing product into a new market, the sales volume of a new product in an existing market, or both. At the product level, export innovation occurs, when a SME first adds a new product to the export basket, despite the fact that the same product may already be exported to the international market by other SMEs. New products are more important to the SME export basket than to those of large enterprises (Parket al. 2018).

Milfelneret al. (2019) assess that innovation and the ability to renew are recognized as important assets that generate value in the commodities market, as well as in all other markets. Therefore, they are significant elements that affect the business performance of SMEs, although Hoffman et al. (1998) suggest that, in spite of the importance that innovative activities have gained in most enterprises, this does not mean that they will have an immediate impact on SMEs and their business activity. Market orientation is of great importance in business performance (Talaja et al. 2017). Moreira and Silva (2013) conclude that market orientation positively influences the development of new products and influences product innovation. According to Reçica et al. (2019) in the more advanced stages of the transition process, innovations related to

the introduction of new and updated products/services proved to have a significant impact on export performance. The impact is stronger on new products than on updated products, which indicates the importance of the degree or level of product innovation.

There is very little empirical and theoretical evidence, regarding the innovative activities of SMEs in the Western Balkan countries. Tankosić and Vapa (2017) are among the few researchers, who studied the impact of product development and innovation activities on Western Balkans SMEs export performance with a special emphasis on Serbia. They conclude that the quality of the product has a very large impact on increasing the level of exports,

while there is no empirical evidence that brand, design and warranty are important elements of export growth. In addition to the impact of technological innovations, the company's intangible resources also influence the development of new products. The transfer of knowledge and its application are very important for the new product cycle. Exporting SMEs that use effectively the knowledge about their competition and business performance are advancing to better meet the needs and requirements of foreign customers. These SMEs generate greater numbers of innovations. The table below shows the percentage of enterprises that introduced a new product/service and introduced a process innovation in the Western Balkan countries.

Table 1. Share of innovating SMEs in the WB region

Western Balkan countries	% enterprises that introduced a new product/service	% enterprises that introduced a process innovation
Albania	9	4
Bosnia & Herzegovina	45	33
Kosovo	56	45
North Macedonia	28	25
Montenegro	25	15
Serbia	40	20

Source: OECD et al., (2019). Available at: www.oecd.org

Mahmutaj and Krasniqi (2020) investigate the role of different types of innovation on firm growth, in terms of their sales. Kosovo's production base is not developed and, therefore, there are not many product innovations of SMEs in Kosovo, although they have an impact on the growth of SMEs. Due to the high innovation costs, SMEs face challenges in terms of resources, personnel and R&D expenditures. Given the turbulent environment, before deciding on innovation development, SME managers must provide the right information on market demands and trends.

The countries of this region have implemented some new policy measures to support innovation in SMEs, though the scale and output have been somewhat mixed. Allocated funds for innovation remain low. It should be noted that SME managers should be informed about the possibilities of using these funds. Only in this way does the absorption capacity of SMEs increase. Laursen and Salter (2006) have shown that, in the early stages of the product life cycle, innovations come from a narrow range of resources, in many cases from a single source only, for example from suppliers, universities, users. In SMEs, where there

are high levels of innovation, but the technology is simple, innovative research models may be narrower than in SMEs, where there are complex technologies, but low levels of innovation.

Božić (2011) emphasizes the need for sophisticated marketing methods to properly support product innovation development. New products lead to better business performance and it is in the interest of SMEs' long-term business growth to innovate. The level of marketing skills, along with the level of technical ability, are important factors that are positively related to the success of the new product. Gati and Bauer (2019) also underline the importance of understanding marketing during the product innovation process, as it can create enhanced results in the development of new products, along with good innovation management. Cieřlik and Michaćek (2017) empirically studied the relationship between SME export performance and various forms of innovation. Their results show that the opportunity to export is positively related to product and process innovations while, marketing and managerial innovations do not positively affect the export performance of the analyzed SMEs. Therefore, support mechanisms for innovation must be developed. These mechanisms would target both product innovations and process innovations, compared to other forms of innovation. Monferrer et al. (2012) have achieved similar results regarding the effect of innovations on SMEs exporting activities. Effective innovation management will lead to increased exports of new products. According to Love and Roper (2015) there is a very strong positive link between export, innovation and performance in terms of productivity and growth. Export activities and innovation jointly improve business performance. It should be noted that productive and well-managed SMEs tend

to innovate and export. Stojcic et al. (2011) conclude that SMEs that have the capacity to deliver product innovations two to three times a year have a higher market share than SMEs that have the capacity to offer innovative products only once.

While these findings have stressed the importance of innovation for SMEs, Božić and Mohnen (2016) have proved the importance of the role of R&D in product innovation. Karbowski and Prokop (2020) emphasize that modern innovation policies should promote R&D investment in the SMEs. The authors also indicate customers as an important source of product and organizational innovations, while innovation in the field of organization and management affect the faster flow of information and creative potential of employees. All types of innovations are important and they all increase the profitability of a SME: technological innovations help reduce costs, while product innovation can lead to an increased demand (Ostrez, 2015; Smajlović et al. 2019).

Schubert (2009) analyzes the impact of organizational and marketing changes on product innovation. According to him, in the context of product innovations, success is defined as part of sales with new products for the market or for the SME. Engaging in organizational or marketing innovation will not only make additional product innovation activities more likely, but also more successful. This makes technological and non-technological innovations strongly related. According to Schmidt and Rammer (2007), process and product innovation activities do not just influence the decision to introduce marketing innovations, but also the decision to introduce organisational innovations.

Stojčić et al. (2018) analyze the impact of creativity on different phases of the innovation process. Its strongest impact is

on transforming innovation spending into innovation output, but it can also strongly influence SMEs' decisions to innovate. Employing creative staff is a key element in the early stages of the innovation process. Creative skills and methods of stimulating creativity are of particular importance especially when it comes to transforming innovative inputs into innovation production. Setiadi et al. (2017) studied the advantages, promoted by environmental strategies, in increasing product innovation and profits, as well as in increasing the social responsibility of exporting SMEs. These strategies have a significant impact on product innovation, because they support the high-quality products, produced in accordance with the environmental standards.

Krasniqi and Kutllorci (2008) find evidence that, in manufacturing SMEs, flexibility, presence of foreign owners or exporting status have a significant impact on innovation. Manufacturing SMEs need more improvements in their technologies to stay competitive, as they are more likely to be affected by exogenous technological changes. These authors attach importance to technological change, which can help innovate and increase competitiveness. Flexibility is a prerequisite for SMEs to change, adopt, improve or install new technologies. Spillover effects have an important impact on innovation, because these effects result from international networking through exporting or presence of foreign owners. All of these elements promote the growth of the SMEs' innovative activities. Market pressures through competition and change of main customer identity, as a percentage of sales, are important factors, influencing positively innovation of SMEs.

Cooper and Kleinschmidt (1987) defined three dimensions of new product

performance. Financial performance includes the overall financial success of the product, which consists of the level of profit and sales, meeting the objectives of profit and sales and the repayment period. The opportunity window shows the level at which the new product opened up new opportunities for SMEs. These new opportunities relate to new product categories and a new market space for SMEs. Market impact is related to the impact of the product on domestic and foreign markets. It also shows the share of the local and international market, and to a lesser extent, relative sales and accomplishment of profit and sales objectives. Kleinschmidt and Cooper (1988) emphasized that maximum success in product innovation is achieved when it is directed toward the global market. New products, designed to meet foreign demand and intended to be sold in international markets, whether to the global, or the nearest neighbor, show great success, both financially and in terms of the market indicators. They do better in both foreign and domestic markets.

The literature review has shown that different authors have used arguments and data (theoretical and empirical), which indicate a positive relationship between innovation and increasing the level of exports. In particular, the creation of new products and the modification of existing ones has a positive effect on increasing the level of exports of various enterprises. Likewise, in order to create and manage innovations some prerequisites have to be met, such as the provision of qualified employees and experts, the development of R&D activities, the development of creative ideas, etc. It should be noted that there is little literature on the innovative activities of Western Balkans exporting SMEs.

3. DATA AND METHODOLOGY

3.1. Sample and hypotheses

In order to achieve empirical and measurable results, a quantitative approach has been used in this paper. The necessary data were collected with a survey, which was administered between September 2018 and March 2019. We analysed 100 exporting SMEs from the manufacturing sector in Kosovo that currently operate in the EU and regional markets. Kosovo has a small number of SMEs, exporting to foreign markets. Therefore, the sample of exporting SMEs is limited to 100 enterprises, which constitute about 80% of Kosovo's exporting SMEs. These SMEs are from the seven regions of Kosovo (Prishtina, Prizren, Gjilan, Peja, Gjakova, Ferizaj and Mitrovica). In the following section, we will outline the most frequent barriers related to the business orientations of Kosovo SMEs operating in the foreign markets (Qorraj and Jusufi, 2019). The main characteristic of Kosovo's trade policy over the past 20 years has been trade liberalization, which has contributed to the state budget, but made Kosovo dependent on the foreign markets. In Kosovo, the trade deficit remains high and Kosovar SMEs consider tariff barriers to be the most difficult challenge for the internationalization of their activities (Kotorri and Krasniqi, 2018).

The target audience of the survey are CEOs, functional managers, commercial managers of manufacturing exporting SMEs in all regions of Kosovo. Due to the nature of the research problem, face-to-face interviews were conducted. The duration of

the interviews ranged from 40 to 90 minutes. All data of exporting companies are provided by the National Customs Agency of Kosovo. In this paper, we test the following hypotheses:

H₁: The use of different quality standards has a positive impact on increasing exports of manufactured products.

H₂: Activities undertaken for product innovations have different impacts on export growth of SMEs.

H₃: Radical innovations have a greater impact than incremental innovations in increasing exports of manufactured products of these SMEs.

H₄: Subsidies for the creation of new products or essential modification of products have a positive impact on the growth of export activities of these SMEs.

3.2. Model and variables

The Probit regression equation is as follows:

$$P(Y_i = 1) = \beta_0 + \beta_1 \text{Quality Standards} + \beta_2 \text{Subsidies for the creation or substantial modification of new products} + \beta_3 \text{Activities undertaken for product innovations} + \beta_4 \text{Radical innovation} + \beta_5 \text{Incremental innovation} + \varepsilon_i$$

The period of analysis covers 2015–2019. The dependent variable is export growth of SMEs. In the questionnaire, respondents were asked whether the export of their SMEs has increased or not in this period.

Table 2. Variable description

Dependent variable	Variables descriptions and measurement
Export growth	1- if the export increased, 0-otherwise
Independent variables	
Quality Standards	1- ISO 9001:2008, 0-otherwise
Subsidies for the creation or substantial modification of new products	1- From European Union funds, 0-otherwise
Activities undertaken for product innovations	1-Research and development for new products in collaboration with other SMEs, 0-otherwise
Radical innovation	1-if SME developed new products, 0-otherwise
Incremental innovation	1- if SME improved existing products, 0-otherwise
Control variable	
Age of the SMEs	1- Up to 10 years, 0- Over 10 years

Source: Authors.

The purpose of the analysis is to explain how Kosovo's SME exports differ from product innovation development, including variables related to quality standards, activities undertaken for product innovations, radical innovation, incremental innovation and subsidies for the creation or substantial modification of new products. Statistical analysis of the data was carried out using the Statistical Package for Social Sciences (SPSS).

The main Kosovo trade partners are the Western Balkans and the EU countries. The SMEs in this sample predominantly export to Croatia, Slovenia, Germany, France,

Bulgaria, Austria, Belgium, Hungary, Italy, Sweden, Luxembourg, Great Britain, Netherlands, Ireland, North Macedonia, Albania, Serbia, and Switzerland.

4. RESEARCH RESULTS

The selected SMEs operate in the following industrial sectors: production of plastic doors and windows (42%), food industry (8%), beverage industry (4%), processing of metals (19%), and furniture (27%). Descriptive statistics of the analyzed variables are presented in Table 3.

Table 3. Descriptive statistics of variables

Variables	N	Mean	Std. Deviation	Minimum	Maximum
Quality standards	100	0.34	0.27	0	1
Subsidies for the creation or substantial modification of new products	100	0.42	0.24	0	1
Activities undertaken for product innovations	100	0.38	0.21	0	1
Radical innovation	100	0.54	0.18	0	1
Incremental innovation	100	0.36	0.22	0	1
Age of the SMEs	100	0.59	0.11	0	1

Source: Authors.

Table 4 presents the answers of the respondents for each of the categories of variables.

Table 4. Respondents' responses according to the categories of variables

Variables	N
Quality standards:	
1- ISO 9001:2008,	56
0- otherwise	44
<i>Subsidies for the creation or substantial modification of new products:</i>	
1- From European Union funds	16
0- otherwise	84
<i>Activities undertaken for product innovations:</i>	
1-Research and development for new products in collaboration with other SMEs	29
0-otherwise	71
<i>Radical innovation:</i>	
1-if SME developed new products	46
0-otherwise	54
<i>Incremental innovation:</i>	
1- if SME improve existing products	42
0-otherwise	58
<i>Age of the SMEs:</i>	
1- Up to 10 year	57
0- Over 10 year	43

Source: Authors.

In order for the results of our model to be relevant, the model diagnostics is used. For this purpose, we need to use the specification test, which shows how specific our model is. As to check the statistical significance of the

model, Goodness-of-fit test is applied and, finally, to check if the regressors are orthogonal, we employ the Multicollinearity test. Specification test results for the Probit model are presented below.

Table 5. Specification test results for the Probit model

Number of observations	100
LR χ^2	17.13
Prob > χ^2	0.004
Pseudo R^2	0.3056
Log likelihood	-12.87271

Source: Authors.

Based on these results, our model is correctly specified and statistically significant. Parts of Goodness-of-fit test are:

- a) Likelihood ratio (LR) test;
- b) Hosmer and Lemeshow's Goodness of-fit test

In most cases, the log of the likelihood is used more often than the likelihood, because it is easier to elaborate. The log of the likelihood is always negative, with higher values (close to zero). This indicates a more convenient model. In our model the log of the likelihood equals -103.49.

Table 6. Hosmer and Lemeshow's Goodness of-fit test

Number of observations	100
Hosmer-Lemeshow χ^2	7.29
Prob > χ^2	0.6453

Source: Authors.

Our model fits the data well if the Hosmer and Lemeshow's test statistic is not statistically significant. Multicollinearity test is performed to verify the heavy correlations between the regressors in the given model. Both the tolerance and variance

inflation factor (VIF) are 1, which shows that they are completely uncorrelated. The tolerance goes to 0, and the VIF gets very large, if a variable is very closely related to another variable. Below are the test results for our model.

Table 7. Multicollinearity test for the Probit model

Variables	VIF	SQRT VIF	Tolerance	R-Squared
Quality standards	1.19	1.06	0.8401	0.1895
Subsidies for the creation or substantial modification of new products	1.20	1.03	0.8362	0.1387
Activities undertaken for product innovation	1.25	1.07	0.8125	0.1295
Radical innovation	1.17	1.12	0.8095	0.1221
Incremental innovation	1.12	1.09	0.8011	0.1187

Source: Authors.

It can be said that there is no presence of severe multicollinearity problem in our

model. Table 8 presents the results of the Probit binary model for each variable.

Table 8. Probit model estimation results

Variables	B	Std. Error	Wald	df	Sig.	Exp (B)
Quality Standards	1.014	0.630	0.034	1	0.538	1.005
Subsidies for the creation or substantial modification of new products	1.503	0.952	0.052	1	0.002***	1.147
Activities undertaken for product innovation	1.321	1.128	1.009	1	0.038**	1.203
Radical innovation	1.009	0.631	3.187	1	0.095*	1.049
Incremental innovation	1.437	0.369	2.264	1	0.011**	3.027
Constant	0.846	1.285	-	1	0.084	0.108

Notes: ***significant at 1%, **significant at 5%, *significant at 10%

Source: Authors.

The following table presents the marginal effect of the independent variables. Marginal effects show the difference in the probability of occurrence of the dependent

variable from a change in each of the independent variables. In our study, all independent variables have only two categories (0 to 1).

Table 9. Marginal effects and robust standard errors of the Probit model

Variables	Marginal effects
Quality Standards	0.103 (0.091)
Subsidies for the creation or substantial modification of new products	0.041** (0.127)
Activities undertaken for product innovations	0.079* (0.136)
Radical innovation	0.019** (0.048)
Incremental innovation	0.004*** (0.547)

Notes: ***significant at 1%, **significant at 5%, *significant at 10%

Robust standard errors of the Probit analysis were clustered and are presented inside parentheses.

Source: Authors.

In our model, we also introduced the age of the SMEs, as a control variable, to see if the age of these SMEs could affect the analysis results. The results show that the age of SMEs did not significantly

affect the change in the result, achieved by the independent variables. Even this variable does not lead to the significance in our model.

Table 10. Probit model estimation results for all variables

Variables	B	Std. Error	Wald	df	Sig.	Exp (B)
Quality standards	1.031	0.532	0.753	1	0.638	1.015
Subsidies for the creation or substantial modification of new products	1.422	0.611	0.453	1	0.029**	1.131
Activities undertaken for product innovations	1.136	0.481	0.632	1	0.615	1.207
Radical innovation	1.003	0.568	0.713	1	0.006***	1.062
Incremental innovation	1.452	0.622	0.536	1	0.018**	2.078
Age of the SMEs (Control variable)	1.012	0.547	0.496	1	0.107	1.019
Constant	0.810	0.995	-	1	0.113	0.114

Notes: ***significant at 1%, **significant at 5%, *significant at 10%

Source: Authors.

Table 11. Marginal effects and robust standard errors of the Probit model for all variables

Variables	Marginal effects
Quality standards	0.111 (0.084)
Subsidies for the creation or substantial modification of new products	0.033 (0.118)**
Activities undertaken for product innovations	0.187 (0.159)
Radical innovation	0.002 (0.037) ***
Incremental innovation	0.028** (0.488)
Age of the SMEs (Control variable)	0.124 (0.098)

Notes: ***significant at 1%, **significant at 5%, *significant at 10%

Robust standard errors of the Probit analysis were clustered and are presented inside parentheses.

Source: Authors.

The quality standards are not significant in our model. Nevertheless, they have a positive relationship with the dependent variable. So, the value of the coefficient of this variable (1.005) shows that its correlation with the increase in exports is positive. The value of the marginal effect also indicates the value of the impact of this variable on the growth of exports of the surveyed SMEs. Many manufacturing companies possess quality standards, which are the result of investing in those at the beginning of the SMEs' business activities.

Subsidies for the creation or substantial modification of new products are significant in our econometric model. The value of 4.1% shows the impact of this variable on the growth of exports of analyzed SMEs. In addition, this variable has a positive relationship with the dependent variable, because the coefficient value of the Probit model is 1.147. It is, therefore, alarming that a small number of exporting SMEs receive support from local or foreign institutions during the process of creating new products. Therefore, these SMEs need to increase their absorption capacity to benefit

from various funds, in particular from the EU.

Activities undertaken for product innovations show a positive and significant relationship with the exporting levels, demonstrating that such important activities matter for export growth. The value of the coefficient of the Probit model (1.203) is positive, while the value of the marginal effect (7.9%) shows the effectiveness of these activities in increasing the exports of the analyzed SMEs. Kadriu et al. (2018) have achieved the same results, where cooperation between SMEs and external knowledge are significant factors that help SMEs to develop innovative products. Gashi et al. (2014) show that a better quality of human resources enables higher quality of production. The high quality of production enables SMEs to export higher quality products at lower prices in international markets. So, human capital and its quality are of great importance in the development of new products. If a SME has the right human capital, with the right skills and abilities, product innovations will be developed much more easily and efficiently.

46 of SMEs have undertaken radical innovations, meanwhile 54 of SMEs have not undertaken this type of product innovation. The Probit model coefficient of radical innovation is 1.049, which means that SMEs with this type of innovation are in a better position, in comparison to other studied SMEs. Krasniq and Dula (2016) found firm size to be more important for product innovation than for process innovation. Likewise, they showed that experience affects the probability of product innovation much more than process innovation. Therefore, it can be said that, due to the small size and not very large experience in export activities, Kosovar SMEs do not develop sufficiently radical innovations. According to Gashi (2014), there are suspicions that the free trade agreements with the EU will harm Kosovo's industry and economy, due to its low production base. Therefore SMEs, need to develop a range of products, in order to withstand the competition caused by the EU products.

Incremental innovation variable shows a strong positive and significant relationship with the dependent variable. The Probit model coefficient (3.027) is very important and shows a large impact of this type of product innovation in increasing Kosovar exports. Meanwhile, the value of the marginal effect (0.4%) shows the impact of this independent variable on the growth of exports of the analyzed SMEs, which makes it a significant variable. Mulleret al. (2018) have provided similar evidence. A new or modified product when introduced to the market will positively affect the growth of exports. Also, our results are consistent with Cassiman and Ros' (2007) findings, which indicate that product innovation is an important driver of exports. Export promotion policies should focus on promoting product innovation, leading further to export.

Šlogar and Bezić (2019) found similar results, concluding that SMEs that engage in innovative activities in product and process development are more likely to export, than SMEs that do not develop such activities. They also provided evidence that product innovations have a higher impact on export activities, than process innovations. Incremental innovations are particularly important, because high quality production is mainly based on this type of innovation. It is evident that the level of innovation and competition of a country's economy depends not only on the internal capacities of SMEs and the sector, but also on the national systems of innovation in the territorial and functional sense. Therefore, all countries need to develop their own innovation systems, in line with contemporary developments. Due to weak national economies, developing countries need to be especially careful in managing innovation systems.

5. CONCLUSION

This paper offers a theoretical background as well as empirical evidence of the product innovation introduction by the Western Balkan exporting SMEs, with special emphasis on those, located in Kosovo. It should be pointed out that the most important type of product innovation present in Kosovo exporting SMEs is incremental innovation. Econometric results show that this type of innovation is significant and has a strong relationship with the export growth. This study differs from others, because product innovation has not been addressed in the scarce research on innovative activities of exporting SMEs in the Western Balkans.

Incremental innovation is about improving or modifying existing products. Therefore, due to the limited capacity, these

SMEs are more focused on incremental, rather than on radical innovations. It can be concluded that, given the economic conditions of the Western Balkans, incremental innovations have a greater impact on export growth than radical ones. It is very important for Kosovar exporting SMEs to develop such innovations. This finding makes us reject Hypothesis 3 as inaccurate. In terms of managerial implications, exporting SME managers need to develop incremental innovations in order to increase their exports. Empirical evidence provides data for Kosovar managers that this type of innovation is more appropriate and useful for increasing export capacity.

In terms of activities undertaken for product innovations, purchase of new machinery for the creation of new products is a significant category. Also, all categories have a positive relationship with the dependent variable. This proves that the SMEs of the Western Balkans lack the appropriate modern technology for the production of high-quality and competitive products, which calls for more investment in manufacturing technology, in order to develop more radical innovations. These technology-related activities have a greater impact on export growth than other activities. Therefore, activities undertaken for product innovations have different impacts on export growth of these SMEs, which is why we accept Hypothesis 2 as correct. Managers need to refine production technology, in particular they must do their best to digitalize the production system of these SMEs, in order to increase production efficiency. It should also be noted that this variable has not been addressed in previous studies. It would, therefore, be of particular importance to elaborate on it to gain better understanding about the impact it may have on increasing the productive capacity of some SMEs.

Subsidies for the creation of new products, or essential modification of products, have an impact on the growth of export activities of these SMEs. Benefiting from the EU funds, especially IPA funds, requires special skills and abilities from the management of SMEs in the Western Balkans. All types of funds are important for product innovations. Therefore, managers of the Western Balkans SMEs' employ all human and professional assets, as to benefit from these funds. We accept Hypothesis 4 as correct. As far as Quality Standards are concerned, it can be concluded that the use of different quality standards does not represent significance in our model. Despite the perception that quality standards have a major impact on the manufacturing base of SMEs, in our model this is not significant. Therefore, we reject hypothesis 1 as inaccurate. Nevertheless, exporting SME managers need to increase the quality of their products through the application of modern quality standards. Certification by modern standards requires greater commitment and adequate human and financial resources.

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EFEKTI INOVACIJE PROIZVODA NA IZVOZNE REZULTATE MALIH I SREDNJIH PODUZEĆA NA KOSOVU

Sažetak

Cilj ovog rada je pružiti bolje razumijevanje čimbenika, koji utječu na inovacije proizvoda, značajne za izvozne aktivnosti malih i srednjih poduzeća (MSP-a). Probit modelom se analizira 100 MSP-a s Kosova, koji izvoze na tržišta EU-a i država u regiji. Empirijski dokazi ukazuju na postojanje veze između tipa inovacije proizvoda i povećanja izvoza. Inkrementalna inovacija pokazuje snažnu pozitivnu vezu s rastom izvoza ovih MSP-a. Dobiveni rezultati mogu pomoći istraživačima inovacije proizvoda u MSP-ovima i menadžera izvoznika - MSP-ova. Studijom se postiže znanstveni doprinos, koji nedostaje u regionalnoj literaturi, a povezan je s djelovanjem inovacije proizvoda na rezultate izvoza MSP-ova.

Ključne riječi: mala i srednja poduzeća (MSP), inovacija proizvoda, izvoz, Kosovo, zapadni Balkan